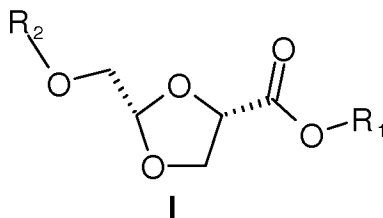


This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of claims:**

1. (Currently Amended): A process for producing a compound of formula I:



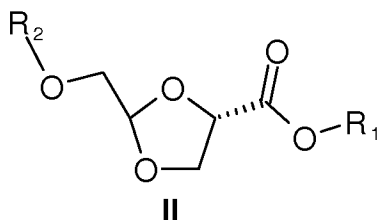
wherein

R<sub>1</sub> is C<sub>1-12</sub> alkyl, C<sub>2-12</sub> alkenyl, C<sub>2-12</sub> alkynyl, C<sub>6-12</sub> aryl, C<sub>3-10</sub> heterocycle, C<sub>6-12</sub> aralkyl or C<sub>3-10</sub> heteroaralkyl, and

R<sub>2</sub> is a hydroxyl protecting group;

said process comprising ~~the steps of:~~

- a) ~~subjecting a compound~~ subjecting a compound of formula II:



to an enzymatic diastereomeric resolution in the presence of a suitable amount of ~~enzyme chosen from Pig Liver Esterase~~ enzyme or Porcine Pancreatic Lipase enzyme;

- b) recovering said compound of formula I

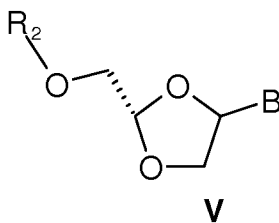
wherein;

~~R<sub>1</sub> is chosen from C<sub>1-12</sub> alkyl, C<sub>2-12</sub> alkenyl, C<sub>2-12</sub> alkynyl, C<sub>6-12</sub> aryl, C<sub>3-10</sub> heterocycle, C<sub>6-12</sub> aralkyl or C<sub>3-10</sub> heteroaralkyl; and~~

~~R<sub>2</sub> is a hydroxyl protecting group.~~

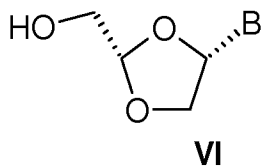
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2. (Original): The process according to claim 1, wherein  $R_1$  is  $C_{1-12}$  alkyl.
3. (Currently Amended): The process according to claim 1 wherein  $R_2$  is ~~chosen~~  
from:  $CO-C_{1-6}$  alkyl,  $CO-C_{6-12}$  aryl,  $CO-C_{1-6}$  alkoxy,  $CO-C_{6-12}$  aryloxy, or  $CO-C_{6-12}$  arylalkyl.
4. (Previously Presented): The process according to claim 1, wherein  $R_2$  is  $CO-C_{6-12}$  aryl.
5. (Previously Presented): The process according to claim 1, wherein the enzyme is Pig Liver Esterase.
6. (Previously Presented): The process according to claim 1, wherein the enzyme is Porcine Pancreatic Lipase.
7. (Currently Amended): The process according to claim 1, further comprising ~~the~~  
~~steps of:~~
  - a) replacing the functional group at position C4 of the compound of formula I to produce a compound of formula V:



wherein B is purine or pyrimidine base or an analogue thereof;

- b) removing the group  $R_2$  of said compound of formula V;
- c) recovering a compound of formula VI:



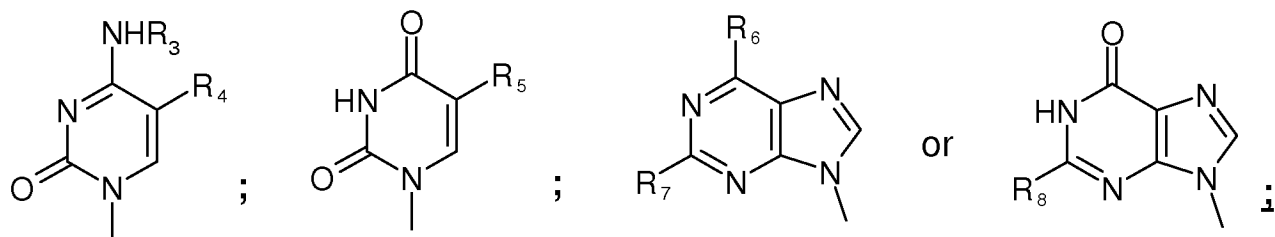
or a pharmaceutically acceptable salt thereof;

~~wherein;~~

~~B is purine or pyrimidine base or an analogue thereof.~~

8. (Currently Amended): The process according to claim 7, wherein

B is ~~chosen from:~~



~~wherein;~~

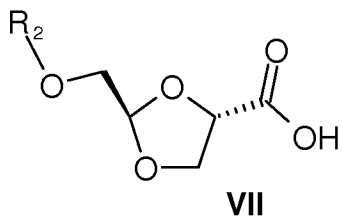
R<sub>3</sub> is ~~chosen from~~ H, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> acyl, or and CO-R<sub>9</sub>; ~~wherein~~

R<sub>9</sub> is H or C<sub>1-6</sub> alkyl;

R<sub>4</sub> and R<sub>5</sub> are each independently ~~chosen from~~ H, C<sub>1-6</sub> alkyl, bromide, chloride, fluoride, iodide or CF<sub>3</sub>; and

R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> are each independently ~~chosen from~~ H, bromide, chloride, fluoride, iodide, amino, hydroxyl, or C<sub>3-6</sub> cycloalkylamino.

9. (Currently Amended): The process according to claim 1, further comprising the step of recovering a compound of formula VII:

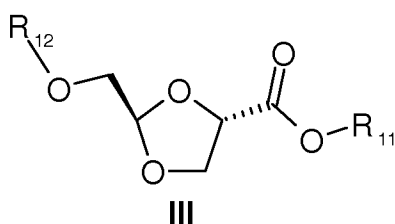


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10. (Original): A process according to claim 1, wherein  $R_1$  is  $C_{1-12}$  alkyl and  $R_2$  is  $CO-C_{6-12}$  aryl.

11. (Original): A process according to claim 1, wherein  $R_1$  is methyl and  $R_2$  is benzoyl.

12. (Currently Amended): A process for producing a compound of formula III:

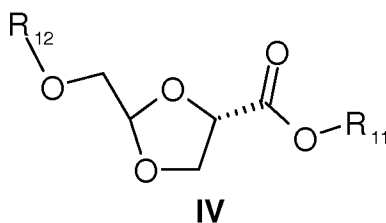


wherein

$R_{11}$  is  $C_{1-12}$  alkyl,  $C_{2-12}$  alkenyl,  $C_{2-12}$  alkynyl,  $C_{6-12}$  aryl,  $C_{3-10}$  heterocycle,  $C_{6-12}$  aralkyl or  $C_{3-10}$  heteroaralkyl; and  $R_{12}$  is a hydroxyl protecting group,

said process comprising ~~the steps of~~:

a) ~~subjecting a compound~~ subjecting a compound of formula IV:



to an enzymatic diastereomeric resolution in the presence of a suitable amount of enzyme,  
wherein said enzyme is chosen from ~~chosen from~~ Candida Antarctica "A" lipase, Candida Antarctica "B" lipase, Candida Lypolitica Lipase, or Rhizomucor Miehei Lipase; and

b) recovering said compound of formula III;

~~wherein;  $R_{11}$  is chosen from  $C_{sub.1-12}$  alkyl,  $C_{sub.2-12}$  alkenyl,  $C_{sub.2-12}$  alkynyl,~~

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~~C.sub.6-12 aryl, C.sub.3-10 heterocycle, C.sub.6-12 aralkyl or C.sub.3-10 heteroaralkyl; and R<sub>12</sub>~~  
is a hydroxyl protecting group.

13. (Original): The process according to claim 12, wherein R<sub>11</sub> is C<sub>1-12</sub> alkyl.

14. (Currently Amended): The process according to claim 12, wherein R<sub>12</sub> is ~~chosen~~  
~~from:~~ CO-C<sub>1-6</sub> alkyl, CO-C<sub>6-12</sub> aryl, CO-C<sub>1-6</sub> alkoxy, CO-C<sub>6-12</sub> aryloxy, or CO-C<sub>6-12</sub> arylalkyl.

15. (Original): The process according to claim 12, wherein R<sub>12</sub> is CO-C<sub>6-12</sub> aryl.

16. (Original): The process according to claim 12, wherein the enzyme is Candida  
Antarctica "A" lipase.

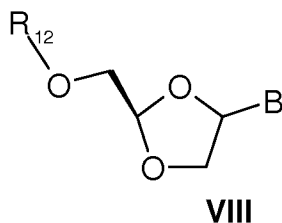
17. (Original): The process according to claim 12, wherein the enzyme is Candida  
Antarctica "B" lipase.

18. (Original): The process according to claim 12, wherein the enzyme is Candida  
Lypolitica Lipase.

19. (Original): The process according to claim 12, wherein the enzyme is  
Rhizomucor Miehei Lipase.

20. (Currently Amended): The process according to claim 12, further comprising ~~the~~  
~~steps of:~~

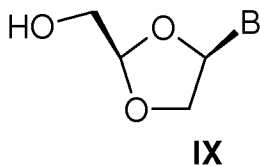
a) replacing the functional group at position C4 of the compound of formula III to  
produce a compound of formula VIII:



wherein B is purine or pyrimidine base or an analogue thereof;

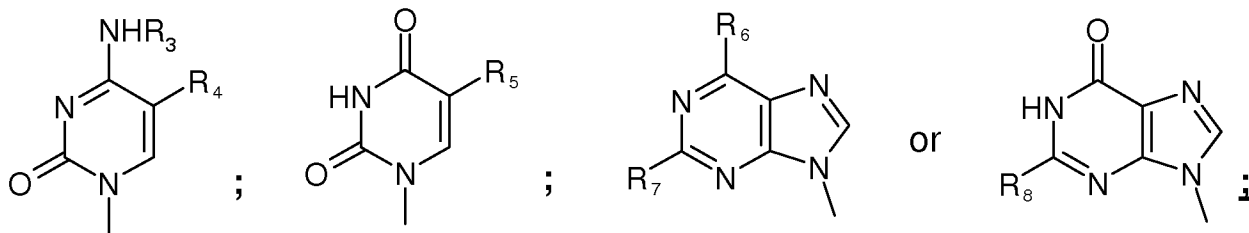
b) removing the group R<sub>12</sub> of said compound of formula VIII;

c) recovering a compound of formula IX:



or a pharmaceutically acceptable salt thereof; ~~wherein; B is purine or pyrimidine base or an analogue thereof.~~

21. (Currently Amended): The process according to claim 20, wherein  
B is ~~chosen from:~~



~~wherein;~~

R<sub>3</sub> is ~~chosen from~~ H, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> acyl and CO-R<sub>9</sub>; ~~wherein~~

R<sub>9</sub> is H or C<sub>1-6</sub> alkyl;

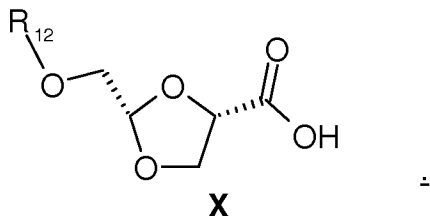
R<sub>4</sub> and R<sub>5</sub> are each independently ~~chosen from~~ H, C<sub>1-6</sub> alkyl, bromide, chloride, fluoride, iodide or CF<sub>3</sub>; and

R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> are each independently ~~chosen from~~ H, bromide, chloride, fluoride, iodide, amino,

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hydroxyl or C<sub>3-6</sub> cycloalkylamino.

22. (Currently Amended): The process according to claim ~~12~~<sup>226</sup>, further comprising ~~the step of converting said compound of formula III to a compound of formula IV and recovering~~  
~~asaid~~ compound of formula X:



23. (Original): A process according to claim 12, wherein R<sub>11</sub> is C<sub>1-12</sub> alkyl and R<sub>12</sub> is CO-C<sub>6-12</sub> aryl.

24. (Original): A process according to claim 12, wherein R<sub>11</sub> is methyl and R<sub>12</sub> is benzoyl.